

REMARKS

On page 2 of the Action, claims 1, 3-5, 11 and 12 were rejected under 35 U.S.C. 102(b) as being anticipated by JP '760. On page 7 of the Action, claims 6-10, 13 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over JP '760 in view of Sugasawara et al.

In view of the rejections, claims 1-7 have been canceled, and claims 8, 11 and 14 have been amended. Also, new claims 15 and 16 have been filed.

A rotary damper in claims 8 and 11 comprises a housing, a viscous fluid housed inside the housing, a rotor, and a sealing member. The rotor is disposed inside the housing, and has an axial portion projecting from the housing and a circular resistive portion which moves through the viscous fluid inside the housing. The sealing member prevents the viscous fluid from leaking between the axial portion and the housing.

In the invention, the rotor has a smooth outer periphery extending continuously without interruption, and flat upper and lower surfaces without a projection. Also, the resistive portion includes multiple air retention portions provided annularly and intermittently around the axial portion thereof.

In claim 8, it is further clarified that the housing has an air movement passage connecting two of the air retention portions, each of said air retention portions being formed by an elongated through-bore completely surrounded by a periphery.

In claim 11, it is further clarified that the housing includes a circumferential annular groove facing the air retention portions and operating as an air movement passage connecting two of the air retention portions.

A damper disclosed in JP '760 includes a casing 20, and a rotor 30. The rotor 30 includes a base, a plurality of projections 30a projecting upwardly and downwardly from the base to form concaves

30b between the projections 30a, and communication holes 30c formed in the base. The casing 20 includes projections 20b forming chambers 20a. The projections 30a are located in the chambers 20a of the casing 20.

In claims 8 and 11, the rotor has flat upper and lower surfaces without a projection. In JP '760, the rotor has projections projecting upwardly and downwardly from the base, and does not have flat upper and lower surfaces, different from claims 8 and 11.

Also, JP '760 does not have the air movement passage connecting two of the air retention portions, or annular groove as the air movement passage.

Therefore, claims 8 and 11 are not disclosed or suggested in JP '760.

In Sugawara et al., a rotary shaft 2 having movable discs 6 is located in a casing 1 having fixed discs 7. Each of the movable discs 6 is located between two fixed discs 7. The movable disc 6 has arc-shaped slits 6c, which accelerate the flow of viscous liquid from the circumferential area to the central area of the casing when the disc is turned in the direction of the arrow with rotary shaft 2 in order to ensure a smooth movement of viscous liquid A among the discs. (column 11, lines 16-22) Accordingly, the arc-shaped slit 6c extends from the circumferentially outer side to the inner side, as clearly shown in Fig. 5c.

In the invention, the resistive portion of the rotor includes multiple air retention portions provided annularly and intermittently around the axial portion thereof. The arc-shaped slits 6c in Sugawara et al. are not formed as in the present invention. Further, the arc-shaped slits 6c are formed to ensure smooth movement of the viscous fluid, not the air retention portions, different from the invention.

Further, Sugasawara et al. does not have the air movement passage connecting two of the air retention portions, or annular groove as the air movement passage.

Therefore, the features of claims 8 and 11 are not disclosed or suggested in Sugasawara et al.


As explained above, claims now pending in the application are not disclosed or suggested by the cited references. Even if the cited references are combined, claims are not obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

One month extension of time is hereby requested. A check in the amount of \$130.00 is attached herewith for the one month extension of time.

Respectfully Submitted,

KANESAKA BERNER & PARTNERS

By 
Manabu Kanesaka
Reg. No. 31,467
Agent for Applicants

1700 Diagonal Road, Suite 310
Alexandria, VA 22314
(703) 519-9785